

FIG. 2 A

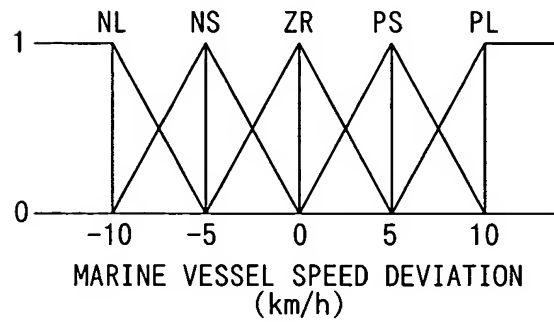
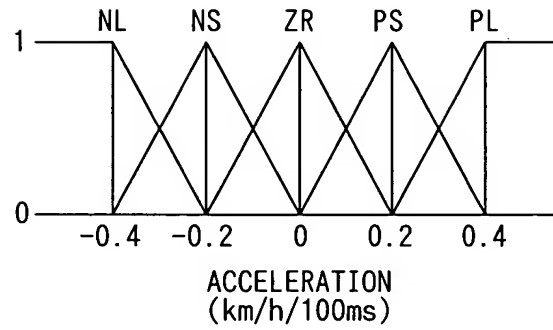
ANTECEDENT MEMBERSHIP FUNCTION

FIG. 2 B

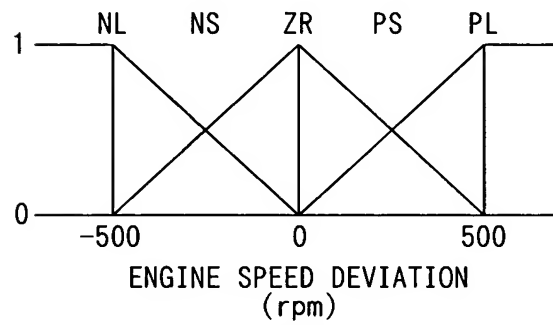
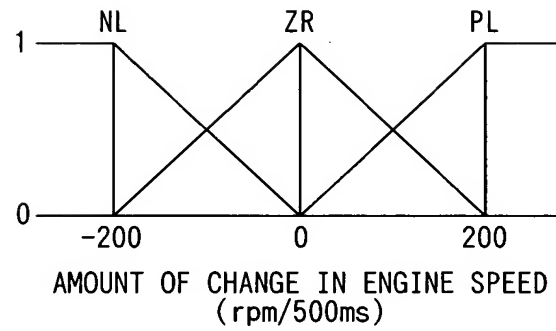
MARINE VESSEL SPEED DEVIATION

ACCELERATION

	NL	NS	ZR	PS	PL
NL	50	50	0	-50	-100
NS	100	100	20	-10	-100
ZR	100	100	20	-10	-100
PS	10	10	-10	-100	-200
PL	-50	-100	-200	-200	-500

AMOUNT OF CHANGE IN ENGINE SPEED
(rpm/100ms)FUZZY RULE

FIG. 3A



ANTECEDENT MEMBERSHIP FUNCTION

FIG. 3B

ENGINE SPEED DEVIATION

AMOUNT OF CHANGE IN ENGINE SPEED

	NL	ZR	PL
NL	8.621	0.345	-0.345
ZR	4.138	0.000	-4.138
PL	0.345	-0.345	-8.621

AMOUNT OF CHANGE IN THROTTLE VALVE POSITION
(%/500ms)

FUZZY RULE

FIG. 4

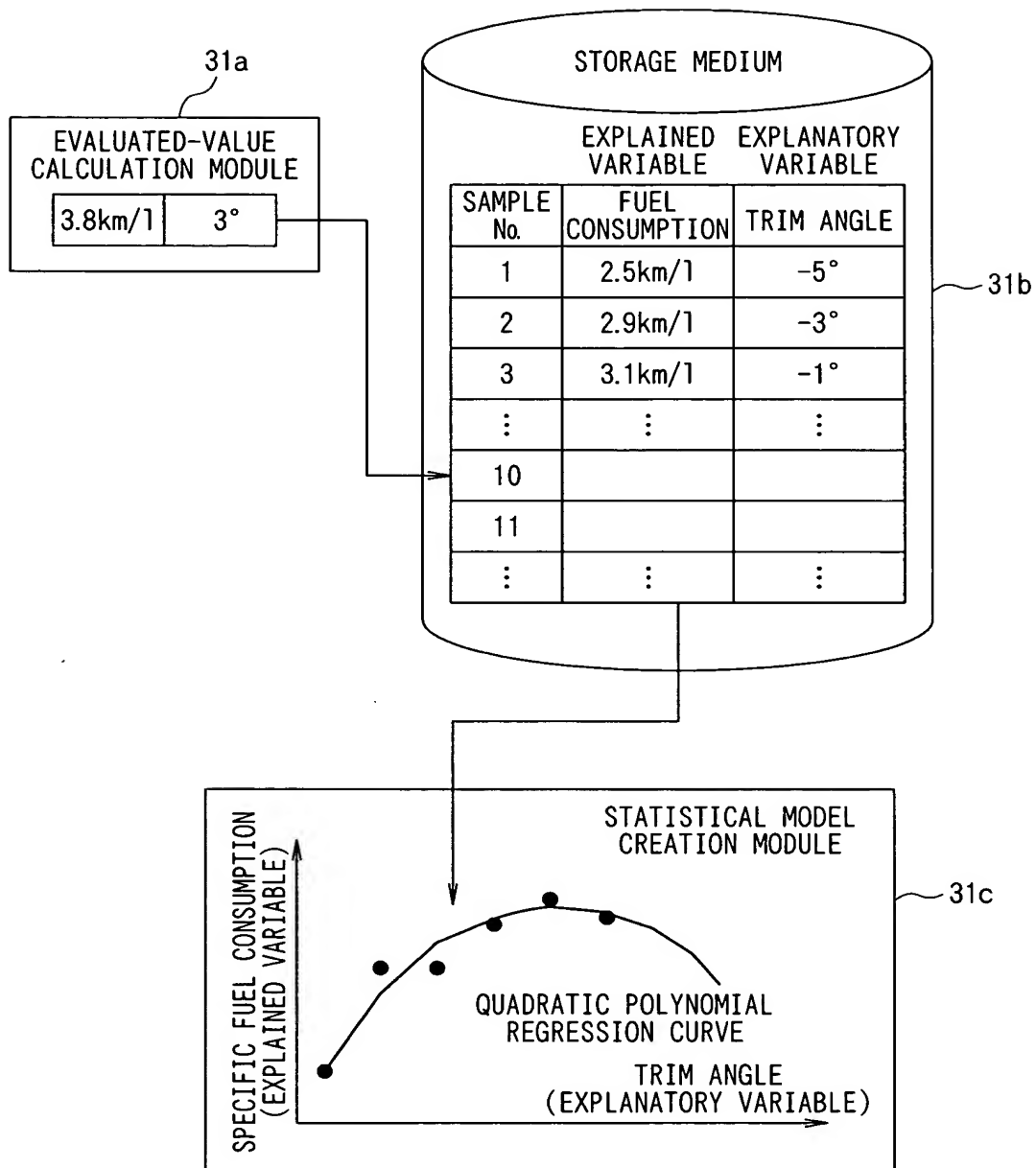


FIG. 5A

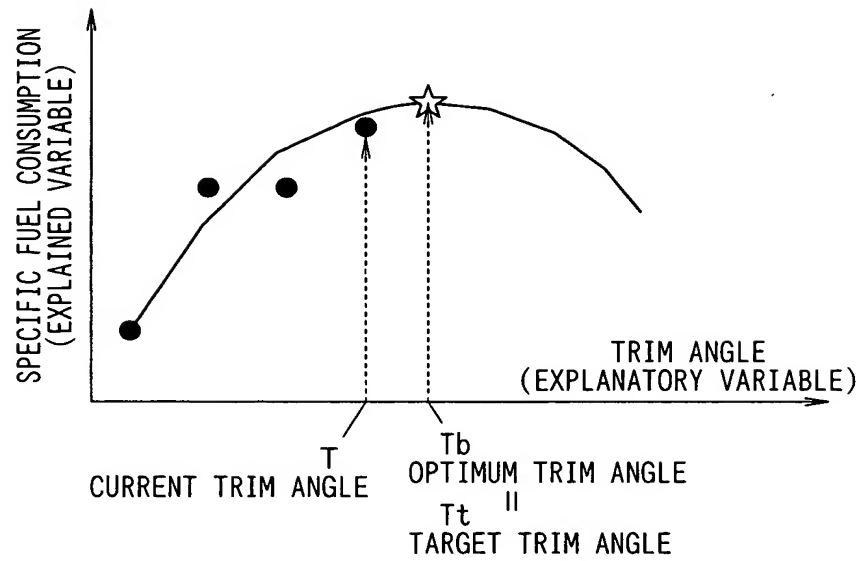


FIG. 5B

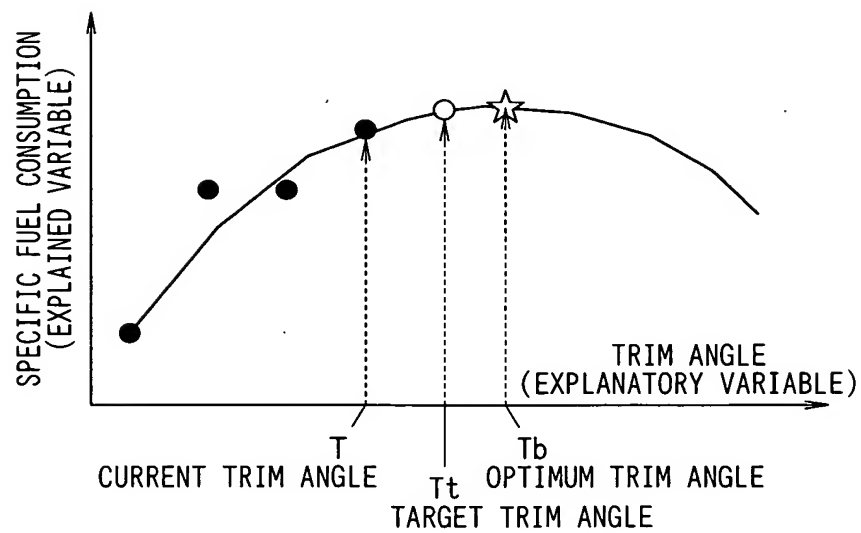


FIG. 6

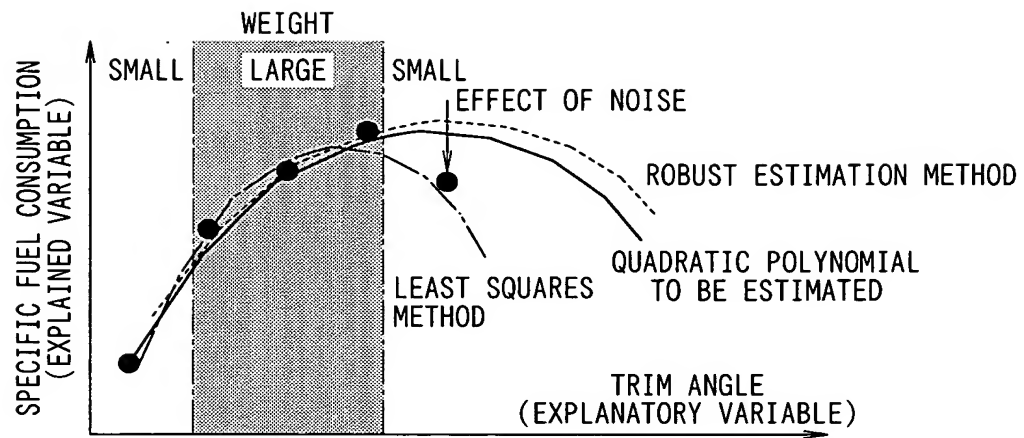


FIG. 7

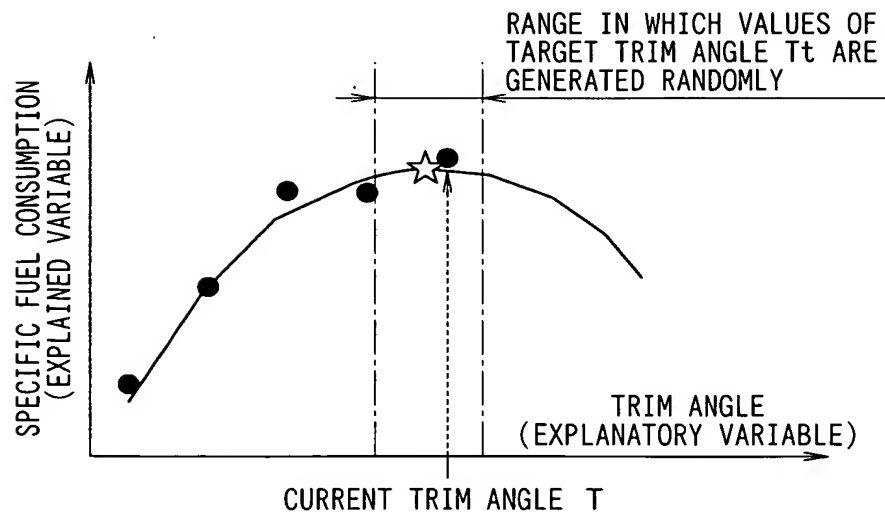


FIG. 8

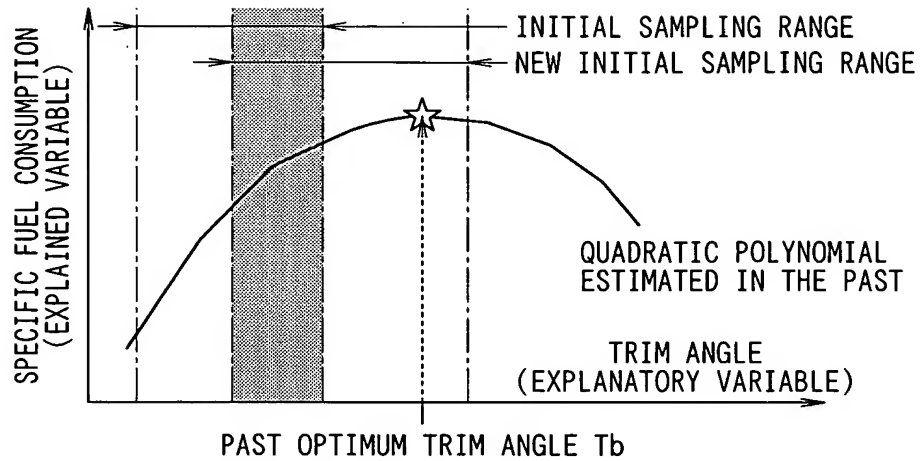


FIG. 9

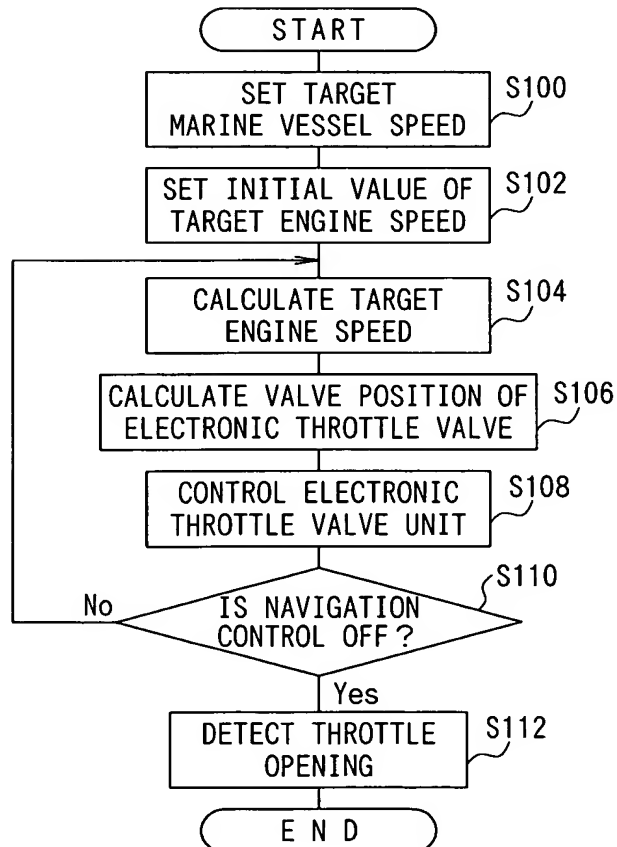


FIG. 10

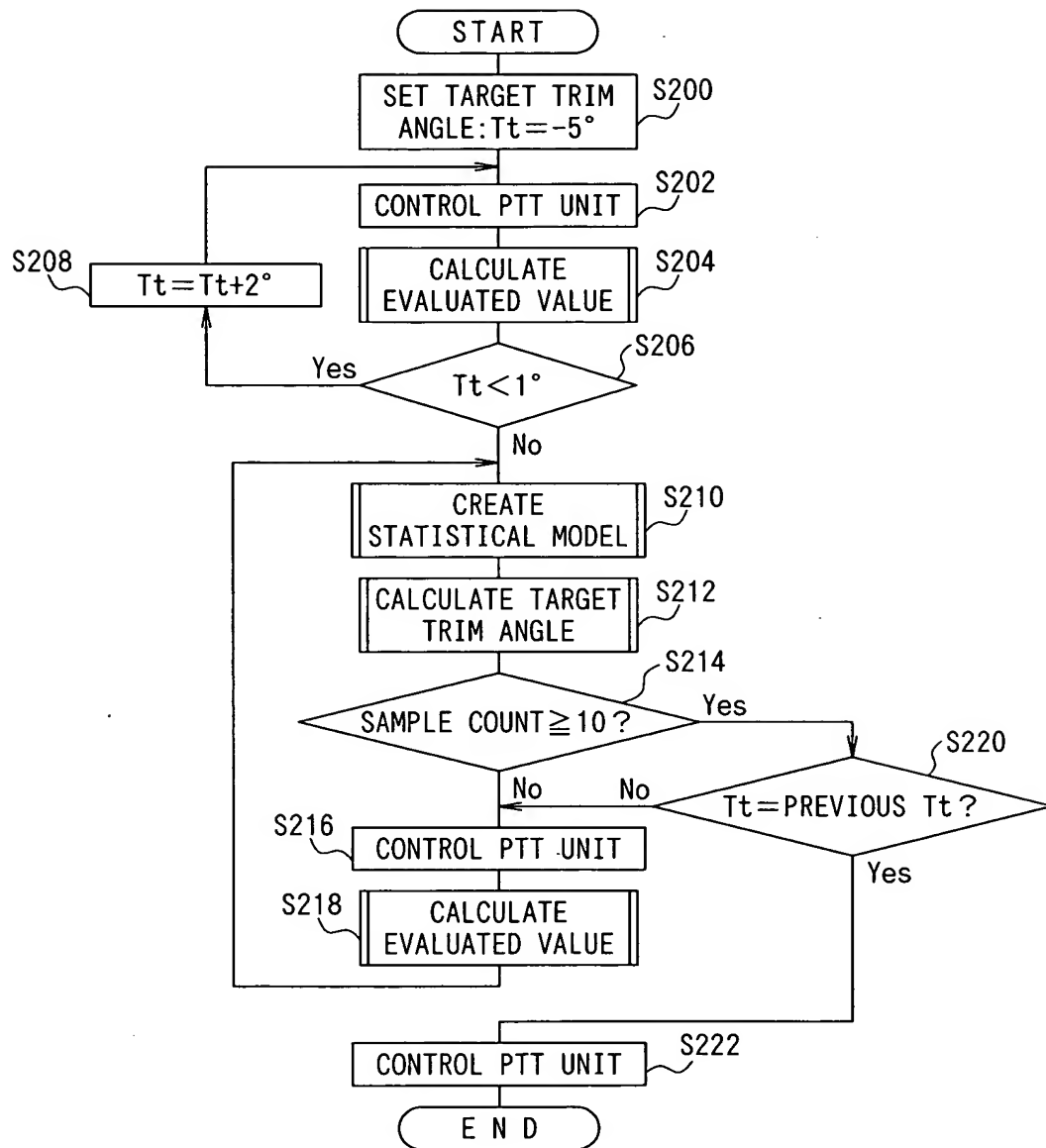


FIG. 11

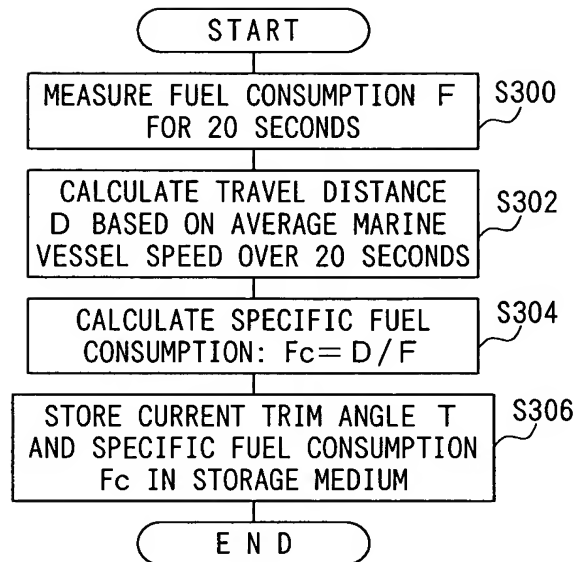


FIG. 12

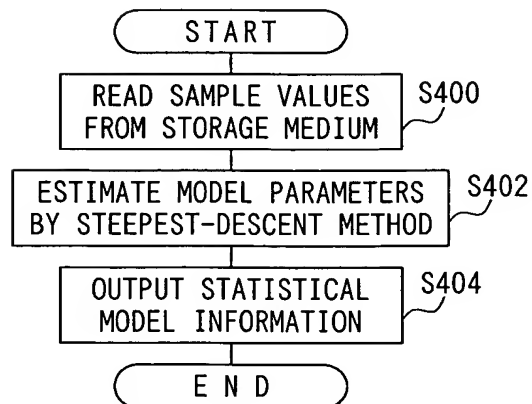


FIG. 13

